

REMARKS

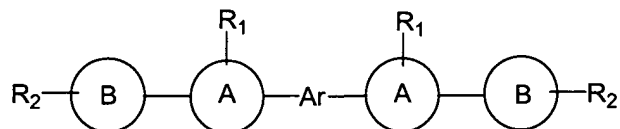
Applicants have amended claims 1 and 20 to more particularly point out and distinctly claim the subject matter which they regard as their invention. The amendments do not introduce new matter as they merely remove a value assigned to a variable in a recited chemical formula. Claims 13-19 and 32-39 were previously withdrawn from consideration.

Claims 1-12 and 20-31 are currently pending. Reconsideration of the application is requested in view of the following remarks.

Rejections under 35 U.S.C. § 102(e)

The Examiner rejects claims 1-4 and 6-10 for anticipation, relying on Oshiyama et al., U.S. Patent Application Publication 20030091860 (Oshiyama). Independent claim 1 will be discussed first.

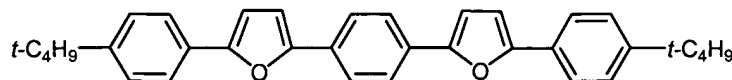
Claim 1, as amended, covers an oligoaryl compound of formula (I):



formula (I).

In the above formula, R_1 is a substituent of A. A is furyl and R_1 is alkenyl, alkynyl, aryl, heteroaryl, cyclyl, heterocyclyl, or oligoaryl, but not hydrogen.

Oshiyama discloses a number of multi-aryl compounds. Among them, the compound shown on page 26 is specifically pointed out by the Examiner as the closest prior art against the rejected claim. See the Office Action, page 4, lines 5-8. Applicants have reproduced the structure of this compound below:



As shown above, the compound relied on by the Examiner contains two furyl moieties, which correspond to the two A's in formula (I) of claim 1. In this prior art compound, the two furyl moieties are unsubstituted; in other words, the moiety corresponding to R₁ in formula (I) of claim 1 is hydrogen. As R₁ cannot be hydrogen, this compound is different from all of the compounds covered by claim 1. Thus, claim 1 is not anticipated by Oshiyama.

For the reasons set forth above, claims 2-4 and 6-10, all dependent from claim 1, are also not anticipated by Oshiyama.

Rejections under 35 U.S.C. § 103(a)

The Examiner rejects claims 20-23 and 25-29 for obviousness, relying on Oshiyama. Independent claim 20 will be discussed first.

Claim 20, as amended, covers an electroluminescence device that contains an anode layer, a hole transporting layer, an electron transporting layer, and a cathode layer. The hole transporting layer includes an oligoaryl compound of formula (I) shown above, which features two A's being furyl and R₁ being alkenyl, alkynyl, aryl, heteroaryl, cyclyl, heterocyclyl, or oligoaryl, but not hydrogen.

Oshiyama teaches that the aforementioned prior art compound, which contains two furyl moieties, can be used as a fluorescent agent in a hole transporting layer. See paragraphs 130 and 134. Based on this teaching, the Examiner concludes that "[i]t would have been obvious that one of ordinary skill in the art to have included [a] furyl-containing compound in [a] hole transporting layer [in an electroluminescence device]." See the office action, page 4, lines 6-7. Applicants disagree.

As discussed above, the prior art compound contains two unsubstituted furyl moieties. By contrast, the compound called for in claim 20 contains furyl moieties, each substituted with alkenyl, alkynyl, aryl, heteroaryl, cyclyl, heterocyclyl, or oligoaryl. Each of these substituents has at least 2 carbon atoms and is therefore significantly bulkier than a hydrogen atom. As the size of a substituent affects the molecular conformation of a compound, the compounds called for in claim 20, which contain two furyl moieties each substituted with a bulky substituent, has a

different molecular conformation than the prior art compound, the furyl moieties of which each are connected to a small hydrogen atom. Different molecular conformations lead to different fluorescent activities. It therefore follows that the compounds called for in claim 20 have different fluorescent activities from those of the prior art compound. Given these differences, one skilled in the art, in view of Oshiyama, would not have been motivated to make a hole transporting layer using a compound called for in claim 20, instead of the prior art compound. In other words, claim 20 is not rendered obvious by Oshiyama.

For the reasons set forth above, claims 21-23 and 25-29, dependent from claim 20, are also not rendered obvious by Oshiyama.

CONCLUSION

Applicants submit that rejections asserted by the Examiner have been overcome, and that the pending claims patentable define subject matter. On this basis, it is submitted that these claims are now in condition for allowance, an action of which is requested.

Enclosed is a \$225 check for the Petition for Extension of Time fee. Please apply any other charges to deposit account 06-1050, referencing Attorney's Docket No.: 08919-082001.

Respectfully submitted,

Date: _____

5-15-06



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